

MASHINSKIY, I.A.; BLINOVA, A.A.; MNUSHKIN, M.L.; APTEKMAN, I.L.; KOTENKOV, P.N.

"Economy and organization of chemical production" by S.Z. Pogostin.
Reviewed by I.A. Mashinskii and others. Khim. prom. no.2:124-126
Mr '57. (MIRA 10:6)
(Chemical industries) (Pogostin, S.Z.)

KALYAZIN, Ye.A.; MNUSHKO, Yu.V.

BSTP-3-6 type marine equipment for measuring and signaling
temperature by means of semiconductor thermoresistances. Inform.
stor. TSNIIMF no.81: Tekh. ekspl. mor. flota no.17:96-100 '62.
(MIRA 16:6)

{Temperature—Measurement)
(Thermistors)

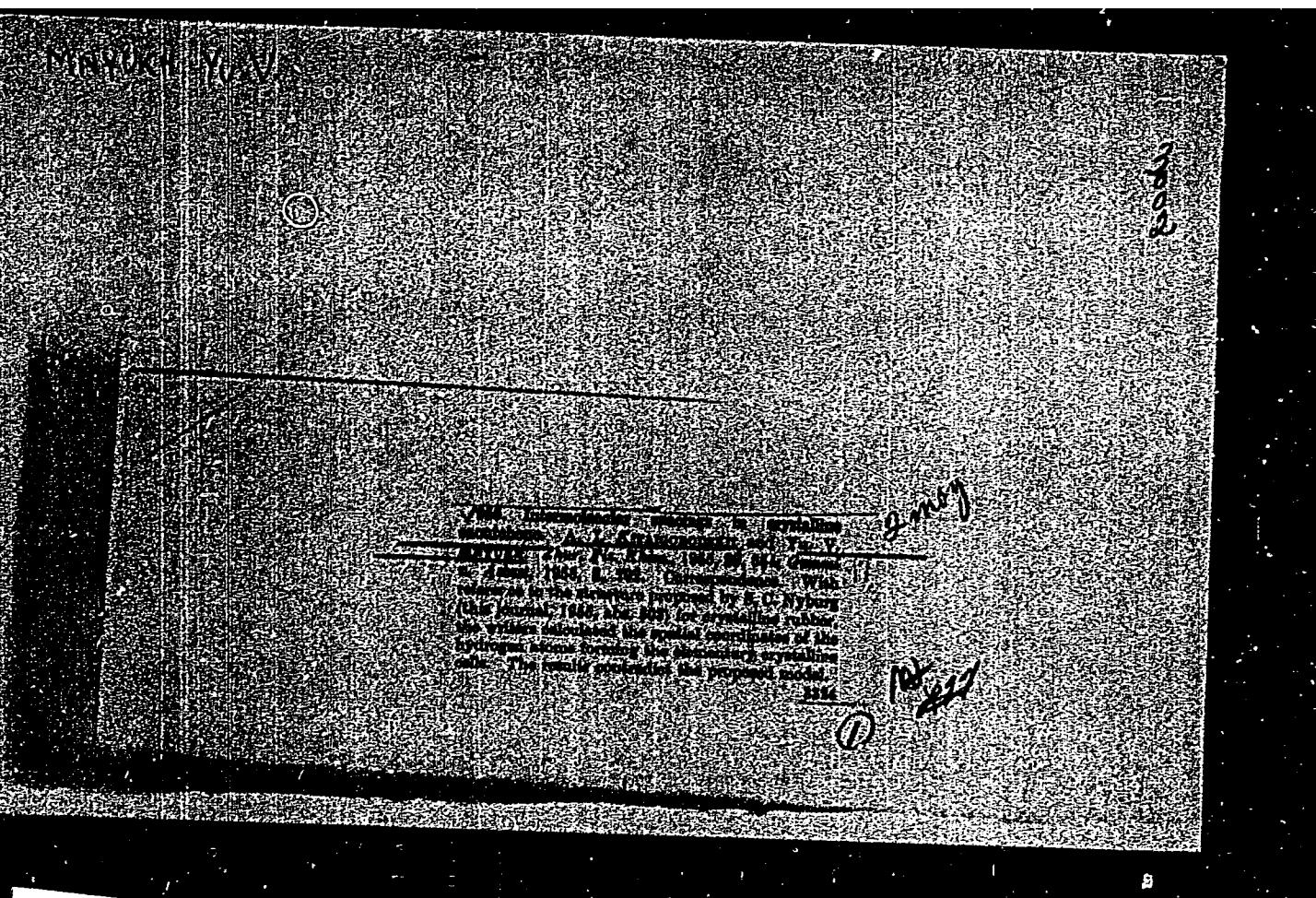
MINKIN, Ye.V., aspirant; SHIBOV, V.I., senior engineer, nauk., k.k.;
MUSKIN, N.K., inzh.

Effect of the preliminary treatment of molten salt on its viscosity at.
Report No.5. Izuchen. trudy NIIKh no.27: 1-6

D. Katedra tekhnologii kompl. i nekhodimostey v radiofizicheskogo
Instituta Lerkoy, res. nauchn. osn.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3



APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3"

WITAKS K. S.

TITLE: An Investigation of Solid Solutions of Certain n-paraffins [C 3 3-2/36
(Issledovaniye tsverdykh rastvorov nekotorykh n-parafinov)

PERIODICAL: Kristallografiya, 1958, Vol 3 Nr 2, pp 298 - 303

ABSTRACT: X-ray and thermographic analysis of the binary systems formed from the paraffins with C_{18} , C_{19} and C_{20} were made. Regularities followed from the theory of close packing of molecules were established and an orthorhombic phase was found in $C_{18} - C_{20}$. In identical conditions the solubility of molecules with longer chains is less than that of molecules with shorter chains. The theoretical conclusion that the solubility of a continuous range of solid solutions in mixtures of odd and even paraffins was confirmed. X-ray powder photographs were taken at four temperatures and at temperatures from -100°C up to the melting points. It was found that in the systems $C_{18} - C_{19}$ and $C_{20} - C_{19}$ there was no continuous range of solid solution. The $C_{18} - C_{20}$ system also showed no continuous range of solid solution, in spite of the isomorphism of the crystals $C_{18}H_{38}$ and

Card 1/2

70 3 3 8/36

An Investigation of Solid Solutions of Certain n-paraffins
 $C_{20}H_{42}$ wh. h are tri-alkin with very similar dimensions.
The region from 8% C_{20} to 81% C_{20} was orthorhombic.
Phase diagrams of the systems C_{12} - C_{13} , C_{13} - C_{14} and
 C_{14} - C_{15} are given. The increased solubility of shorter
molecules in a given solvent is explained by the lesser
disturbance to the structure caused by holes in the structure
compared to that caused by extra groups inter dinig.
There are 5 figures and 2 references, 6 of which are 3D, 1
2 English and 1 French.

ASSOCIATION Institut elementarorganischer und physikalischer
Technik (Institute of Elementary-organic Chemistry, Physico-
Technical Institute)

SUBMITTED: December 4, 1951,
Card 2/2

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3

MINKE, YU. V. - Master's Dissertation, Chernogolovka Institute of Radioelectronics, 1960
("Normal parameters and the range of stability of the system $\dot{x} = f(x) + g(x)$, $\dot{y} = h(y)$."
Supervisor, Prof. G. V. Kravtsov, 01-03-1960, Moscow, USSR)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3"

AUTHOR: Mnyukh, Yu. V. S. V. 12-1-1974
TITLE: X-Ray Investigation of the Structure of the Straight-Chain Polyesters (Rentgenostrukturnoye issledovaniye linearnykh polieifirov)
PERIODICAL: Izvestiya Akademii Nauk SSSR. Otdel fiziki i khimii, 1958, Nr 9, pp 1128 - 1129 (USSR)
ABSTRACT: The work reported up to now concerning investigation on polyesters by means of X-ray analysis (Ref. 1-4) does not show any definite results, mainly because of the diversity of the experiments. In the present report communication the author's kind of investigation using the X-ray powder method is considered. This type of investigation was extended to a series of straight-chain polyesters. In this case where the structure is mainly determined by the kind of packing of the methylene groups, the straight-chain polyesters possess a repeating crystal unit similar to that of paraffin and "polythene". These are more easily detected when they contain more carbon atoms. The sizes of these unit cells can indicate what systematic changes occur in the structural framework of
Card 1/2

X-Ray Investigations of the Structure of the Straight-¹ Chain Polyesters

this homologous series. The impossibility of the so-called "displacement hypothesis" (svivjovaya hipoteza) was proven. There are 1 figure, 1 table, and 7 references, 1 of which is Soviet.

ASSOCIATION: Institut elementoorganicheskikh soedinenii Akademii Nauk SSSR (Institute of Elemental-organic Compounds, AS USSR)

SUBMITTED: March 13, 1959

Card 2/2

AUTHOR:

Mayukh, Yu. V.

SC7/22-1-10-24, 25

TITLE:

X-Ray Investigations of the Structure of the Ethylbenzene
Polyester (Rентгеноструктурные исследования полифира
этилбензидиола и диметилкарбоновой кислоты)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1958, Nr 10, pp 1276 - 1277 (USSR)

ABSTRACT:

The purpose of the investigation communicated in this paper was the explanation of those differences becoming evident in the structure of the polythene type with rhombic subcell on the introduction of substituents into the molecular chain. In such an introduction of a small number of ethereal groups the basic structure remains the same. The molecular chains are reversed at the c_0 axis, with a good packing of the oxygen atoms of the $C=O$ groups made possible. The determination of the hydrogen atoms in the calculation values of the intensities (in a structure of this type) is necessary. There are 2 figures, 1 table, and 7 references.

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X-Ray Investigations of the Structure of the
Bicosanediol Polyester

S.V. 2-11-10-10, 2

ASSOCIATION: Institut elementoorganicheskikh soedinenii Akademii
nauk SSSR (Institute of Elementary Organic Compounds AS USSR)

SUBMITTED: March 13, 1968

Card 272

MONYUKH, Yu.V.

Camera for studying small-angle X-ray scattering. Zav. lab. 24
no. 5:644 '58. (MIRA 11:6)

1. Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR.
(X rays—Equipment and supplies)

AUTHORS:

Kitaygorodskiy, A. I., Mnyukh, Yu. V. SCV/20-1 1-1-5-15

TITLE:

A Triclinic Modification of Polythene (Triklinicheskaya modifikatsiya politena)

PERIODICAL:

Doklady Akademii Nauk SSSR, 1958, Vol. 121, Nr. 1, pp. 112-115
(USSR)

ABSTRACT:

1) Molecules of the paraffin type may crystallize either in a triclinic (T), monoclinic (M), or rhombic (R) form (Ref. 1). Triclinic subcells were found in normal paraffins with an even atomic number of carbons from C₁₈ to C₂₆ and in some normal sebacic acids, and others, whereas rhombic were found in the case of polythene and other straight paraffins of C₁₈ and in the case of some normal sebacic acids. Substances with monoclinic subcells have hitherto not been found. The difference in free energy between the packing R and T is not great. Even several percents of admixtures of adjacent homologues cause the transformation of the triclinic structure of an n-paraffin to a rhombic one. The packing in the T-subcell has the highest density of all possible packing types, the R-subcell has, however, a higher symmetry. The probable existence

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A Triclinic Modification of Polythene

SOV/20-121-1-31/3

of the triclinic polythene modification was already earlier pointed out on the strength of the analysis of the packing of long chain molecules (Ref 4). 2) As far as the T-subcell has a high coating density we may assume that this strength is possible only in polythene samples with perfect structure, i.e. the cleanest and with a minimum number of side ramifications. A Debye-Scherer X-ray diagram gave an image which is characteristic of a two phase system R + T. The modification occurred in a smaller quantity than the rhombic one. Figure 1 shows the last mentioned X-ray diagram and another one for the phase diagram of n-paraffins (Ref 5). The measurement of interplanar spacings and the comparison of the intensities confirmed finally the existence of the triclinic modification of polythene under normal conditions (Table 1). If the obtained results are compared with the data from the investigation of the n-paraffin C₃₀ under high pressure (personal note of S. S. Kabanina and L. F. Vereshchagin) a second phase is detected beside the rhombic one (Table 1) in n-C₃₀. Thus the existence of the triclinic polythene modification which was assumed earlier by the authors was proved. There are 1 figure, 1 table, and 6 references, 4 of which are Soviet.

Card 2/3

A Triclinic Modification of Polythene

SOV/60-1.1-13, '58

ASSOCIATION: Institut elementarnicheskikh soyedineniy Akademii Nauk SSSR
(Institute of **Elementary Organic** Compounds AS USSR)

PRESENTED: March 1, 1958, by V. A. Kargin, Member, Academy of Sciences,
USSR

SUBMITTED: February 28, 1958

1. Methanes--Crystallization 2. Methanes--Molecular structure
3. Methanes--X-ray analysis

Card 3/3

AUTHORS: Kitaygorodskiy, A. I., Mnyukh, Yu. V. SOV/20-121-2-27/53

TITLE: The Variation of the Intermolecular Distances in Paraffin
 $n\text{-C}_{30}\text{H}_{62}$ With Temperature. Refining of the Molecule Form
of the Paraffins (Temperaturnyye izmeneniya mezhmolekulyarnykh
rasstoyaniy v parafine $n\text{-C}_{30}\text{H}_{62}$. Utochneniye formy molekuly
parafinov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 2, pp. 291 -
294 (USSR)

ABSTRACT: In the present paper a report is given on investigations of the
subcells of normal paraffins. 2 forms of such subcells are
known: The orthorhombic cell (R) and the triclinic (T) one
(Refs 1,2). The purpose of the investigations was to explain
details of the structures and to determine the distances between
the separate H-molecules. The investigation was limited to:
 $n\text{-C}_{30}$ -paraffin (R-subcells), $n\text{-C}_{18}$ -paraffin (T-subcells), normal
fatty acids (basic pattern of the packing as in normal paraffin,
but steric hindrance because of the COOH-group; therefore
packing frequently diverging from paraffin), penta decanoic

Card 1/3

SOV/20-121-2-27/53

The Variation of the Intermolecular Distances in Paraffin n-C₃₀H₆₂ With Temperature. Refining of the Molecule Form of the Paraffins

acid (T subcells with a=5,01 Å and b=4,25 Å), and iodoform (J₁ - J'₁ = 3,98 Å, J₂ - J'₂ = 4,34 Å). For n-C₃₀-paraffin was obtained:

Distance between	(+52°)	(+20°)	extrapolated to -273°
H ₁ - H ₃	2,53	2,48	2,34
H ₁ - H ₄	2,95	2,92	2,86
H ₂ - H ₄	2,92	2,86	2,74
H ₂ - H ₅	2,43	2,42	2,36

There are 4 figures, 1 table, and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Elemental Organic Compounds, AS USSR)

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SOV/20-121-2-27/53

The Variation of the Intermolecular Distances in Paraffin $n\text{-C}_{30}\text{H}_{62}$ With
Temperature. Refining of the Molecule Form of the Paraffins

PRESENTED: March 13, 1958, by N. V. Belov, Member, Academy of Sciences,
USSR

SUBMITTED: March 7, 1958

Card 3/3

N Y U K H , Yu. V.

CHIKHACHOV, A. I.; COZIN, Victor Mikhaylovich; KOLOSOV, S. Ya.;
DOKHAY, Igna; NESTOR, Taty Vladiimirovich; KASHKHOVA, E. N.
Bystrukova,

"Conditions of Formation and the Structure of Solid Solutions of
Organic Substances"

A report presented at Symposium of the International Union of
Crystallography Leiden, 21-27 May 1959

KITAYGORODSKIY, A.I.; MYUKH, Yu.V.

Structure of solid solutions of n-paraffins. Vysokom. soed. 1
no.1:128-131 Ja '59. (MIR 12:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Solutions, Solid) (Paraffins)

1.4
AUTHOR:

Mnyukh, Yu. V.

SOV 76-33 7-28-86

TITLE:

The Temperature Coefficient of the Expansion of the n-Pentaffin
 $C_{10}H_{22}$

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 7.
pp 1638 - 1640 (USSR)

ABSTRACT:

The author investigated the variation of the intermolecular distances with temperature in crystals of solutions with long carbon chains. For this purpose, the crystal parameters were measured which are characteristic of many substances of this type, i.e. the parameters of the rhombic subcell of the paraffin C_{10} in the face which is perpendicular to the chains. Measurements were made within the temperature range -110° - 50°C. and powders were X-rayed for this purpose. The author employed a standard X-ray chamber which had been modified for pictures taken within a temperature range of up to +80°C (VKS chamber, Scheme in figure 1) as well as for cooling to -140°C (MK-114 chamber, Scheme in figure 2). Temperature was measured by means of a copper-constantan thermocouple and an M-117 millivoltmeter.

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The Temperature Coefficient of the Expansion of the
n-Paraffin C₁₂H₂₆

The author used K_a rays of copper. The parameters were measured according to the reflexes (110) and (200). A layer was applied to a copper wire (0.2 mm thick) in such a manner that the sample was 1 mm thick. The measurement result (Table 1) can represent the anisotropy of parameter variation. The results of a crystalline subcell during thermal expansion, show that the cell is changed particularly with respect to parameter *a*. The following limits were obtained for low temperatures:

$$a = 7.18 \pm 0.02 \text{ KX}$$

$$b = 4.86 \pm 0.02 \text{ KX}$$

In conclusion the author thanks Professor A. I. Kitaigorodskij for his assistance. There are 1 figures, 1 table, and 9 references, 1 of which is Soviet.

ASSOCIATION: Akademija nauk SSSR, Institut elementoorganicheskikh soedinenij (Academy of Sciences of the USSR - Institute for Elemento-Organic Compounds)

SUBMITTED: January 11, 1958
Card P-2

S (4)

AUTHOR:

Mnyukh, Yu. V.

SC7/76 33-8-10/1;

TITLE:

The Amorphous Phase in n-Paraffins

PERIODICAL:

Zhurnal fizicheskoy khimii 1959 Vol 33, Nr 8, p 1721 (USSR)

ABSTRACT:

In the X-ray photographs of polyethylene (I) an amorphous ring of the "fluid type" may be observed. It is characteristic of melted (I) since it occurs side by side with the reflexes caused by the crystal lattice (Ref 1). The question of the structure of the amorphous part of the polymers and its binding with the crystalline part has as yet not been clarified. It was found that a similar picture as in the case of (I) can also be observed in the X-ray photographs of n-paraffins. Diagrams (Figure) obtained after microphotometry of the powder X-ray photograph of the n-paraffin C₃₀ as well as at a temperature above the melting point show that a small amount (approximately 5%) of an amorphous phase is present in the basic crystalline structure. It was found that the amorphous ring of the "fluid type" appears on the X-ray photograph when the melted sample is chilled in liquid nitrogen as well as during crystallization from the solution. The amorphous phase was also observed with paraffin

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The Amorphous Phase in n-Paraffins

SOV/76-33-8-19/39

C_{32} so that the phenomenon observed is characteristic not only of high polymers, as has so far been assumed. Finally, the author thanks Professor A. I. Kitaygorodskiy. There are 1 figure and 1 Soviet reference.

ASSOCIATION: Akademiya nauk SSSR, Institut elementoorganicheskikh soyedineniy (Academy of Sciences, USSR, Institute of Elemental-organic Compounds)

SUBMITTED: January 31, 1958

Card 2/2

5(4)

SCV/76-35-9-30/37

AUTHOR:

Mnyukh, Yu. V.

TITLE:

X-Ray Structural Examination of Linear Polyesters

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 9,
pp 2076 - 2080 (JSSR)

ABSTRACT:

The author first refers to a brief article published in Izv. AN SSSR (OKhN), 1958, Nr 9, p 1128. On the bases of several investigations (Refs 1-4) C. S. Fuller obtained some results concerning the kind of molecular packing of polyesters (P). As his methods were insufficient, these results are imperfect and partly unfounded. The following series of (P) were investigated here: of ethylene glycol (I), trimethylene glycol (II), tetramethylene glycol (III), pentamethylene glycol (IV), hexamethylene glycol (V), decamethylene glycol (VI), and of eicosamethylene glycol (VII). All dicarboxylic acids including decamethylene dicarboxylic acid (except nonamethylene dicarboxylic acid) were used for esterification. The substances to be investigated were synthesized by the Laboratoriya vysokomolekulyarnykh soyedineniy INEOS AN SSSR (Laboratory for Compounds of High Molecular Weight INEOS, AS USSR). Since these

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X-Ray Structural Examination of Linear Polyesters

SCV/75-33-9-50/37

substances had only a small molecular weight, and no filaments or films could be prepared, the method of powder pattern was applied wherefrom Debye powder patterns were obtained. Wherever the structure is determined in principle by the packing of the methylene groups, the (P) must exhibit a rhombic sub-lattice (S) (of the paraffin or polyethylene kind). In a table (Table 1), the substances under investigation are divided into three groups. Group A (VII) contains the (P) with radiograph lines which chiefly correspond to the (S), group B ((III), (IV), and (V)) represents a transition, and group C (II) contains (P) without any (S) of the afore-mentioned kind, i.e. the molecules of the last-mentioned group have no zigzag form, and the packing differs from that of polyethylene. Investigations concerning the dimensions of rhombic (S) and the position of the oxygen atom (Table 2) led to the assumption that the lattice constants within the homologous series vary systematically. The "shear" hypothesis applied by Fuller does not hold for the case under discussion. This investigation was made under the supervision of Professor A. I. Kitaygorodskiy. There are 1 figure, 2 tables, and 6 references, 1 of which is Soviet.

Card 2/3

X-Ray Structural Examination of Linear Polyesters

SC7/76-55-9-50.37

ASSOCIATION: Institut elementoorganicheskikh soyedineniy, Akademiya nauk SSSR
(Institute for Elemental-organic Compounds of the Academy of Sciences of the USSR)

SUBMITTED: March 12, 1958

Card 3/3

05815

SOV/76-33-10-13/45

24(4), 5(4)

AUTHOR:

Minyukh, Yu. V.

TITLE:

X-Ray Structural Analysis of the Polyester of Eicosandiol and
Decamethylene Dicarboxylic Acid

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 10, pp 2190-2195
(USSR)

ABSTRACT:

The author analyzed the structure of linear polyesters which have one oxygen atom in the molecule chain per several CH_2 -groups. He checked the correctness of Bunn's interpretations (Ref 1) as well as the properties of the packing of a molecule (of the ester mentioned in the title) that differs from that of polyethylene only in some oxygen atoms. Steric obstacles in the subcell are, in principle, produced in the packing of molecule chains of the afore-mentioned polyesters only by oxygen atoms (Fig 1). Radiographs have shown that the polyester has a polyethylene packing (pseudopolyethylene packing). The packings of polyethylene and the polyester were compared according to the face xy (perpendicular to the axis of the molecule chain), i.e. the cross section $z = 1/4$ of electron density was calculated, and the intensity was measured by means of an MF-4 microphotometer. The values of the structural amplitude were determined according to an inequality and by Zakhariasen's

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05815

SOV/76-33-10-13/45

X-Ray Structural Analysis of the Polyester of Eicosandiol and Decamethylene
Dicarboxylic Acid

method (Table 1). Herefrom it resulted that the elementary cell of the polyester differed from that of polyethylene insofar as it allowed the oxygen atom to enter the structure (of the kind of polyethylene). The intermolecular distances attain mean values. The differences of experimental and calculated values obtained in reference 1 are to be explained by the neglection of the hydrogen atom in the calculations (Table 2) and not by the anisotropy of heat vibrations and the shape of the electron cloud of the CH_2 groups as assumed by Bunn. This investigation was supervised by Professor A. I. Kitaygorodskiy. There are 3 figures 3 tables, and 6 references, 5 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut elementoorganicheskikh soyedineniy
(Academy of Sciences of the USSR, Institute for Elemental organic Compounds)

SUBMITTED: March 13, 1958

Card 2/2

24.7100

AUTHORS: Kitaygorodsky, A. I., et al., V. I.

TITLE: Crystallization and the Properties of Tetraethyl Modification.

PERIODICAL: Izvestiya Akademii Nauk SSSR. Nauki Khimicheskikh nauk, 1961, No. 1, p. 103-106 (USSR)

ABSTRACT: The authors analyzed the structure of the paraffin layers, which are formed by the crystallization of paraffins, tetraethyl modification, and benzene. Testing the paraffin layers, the authors found that the paraffin thickness varies from 10 to 15 microns, and the distance between the paraffin layers is 100-150 microns. The authors also found that the paraffin layers are not completely bonded to the cellulose fiber; for the characteristics of the paraffin, Y, and the agents used (Kitaygorodsky, A. I., et al., ibidem, 1961, No. 1, p. 106 (1961)) with the exception of cellulose, the multi-dimensional parameters of the cellulose, A., I., K., etc. (Acta Cryst., 1959, No. 12, p. 100), are given in the table.

Card 1/4

Crystalline Structure of the Lamellar
of Triclinic Modification

below shows the sequence of layers in the crystal
building up the lamellae.

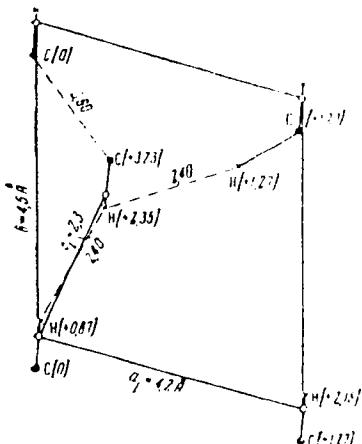
Layer	$\frac{1}{2} \text{A}$	$\frac{1}{2} \text{B}$	$\frac{1}{2} \text{C}$	$\frac{1}{2} \text{D}$	$\frac{1}{2} \text{E}$	$\frac{1}{2} \text{F}$	$\frac{1}{2} \text{G}$	$\frac{1}{2} \text{H}$	$\frac{1}{2} \text{I}$	$\frac{1}{2} \text{J}$	$\frac{1}{2} \text{K}$	$\frac{1}{2} \text{L}$	$\frac{1}{2} \text{M}$	$\frac{1}{2} \text{N}$	$\frac{1}{2} \text{O}$	$\frac{1}{2} \text{P}$	$\frac{1}{2} \text{Q}$	$\frac{1}{2} \text{R}$	$\frac{1}{2} \text{S}$	$\frac{1}{2} \text{T}$	$\frac{1}{2} \text{U}$	$\frac{1}{2} \text{V}$	$\frac{1}{2} \text{W}$	$\frac{1}{2} \text{X}$	$\frac{1}{2} \text{Y}$	$\frac{1}{2} \text{Z}$		
$M[00]$																												
$M[\pm 1,0]$																												
$M[0,\pm 1]$																												
$T\left[\begin{array}{c} 1 \\ +2,0 \end{array}\right]$																												
$T\left[\begin{array}{c} 1 \\ 2,1 \end{array}\right]$																												
$T\left[\begin{array}{c} 1 \\ 2,-1 \end{array}\right]$																												
$\text{Paraffin } C_{16}H_{38}$	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	

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Crystalline Structure of the Layered
of Triclinic Molybdate

Comparisons between the structure of $\text{Mo}_3\text{O}_10 \cdot 2\text{H}_2\text{O}$ and $\text{Mo}_3\text{O}_10 \cdot 2\text{H}_2\text{O} \cdot \text{H}_2\text{O}$, which amounts to the removal of one water molecule from the structure, show that the d_{001} for the molybdate (001) plane is increased by 0.07 \AA . This is in accordance with the experimental data obtained by X-ray diffraction of the layer $\text{Mo}_3\text{O}_10 \cdot 2\text{H}_2\text{O} \cdot \text{H}_2\text{O}$ which makes up the main part of the triclinic molybdate. The comparison of the intensities of the reflections from the layers ($\text{Mo}_3\text{O}_10 \cdot 2\text{H}_2\text{O} \cdot \text{H}_2\text{O}$) and the molybdate structure shows that the values for the corresponding reflections are close. Figure 1 shows the structure of the molybdate layer in $\text{Mo}_3\text{O}_10 \cdot 2\text{H}_2\text{O} \cdot \text{H}_2\text{O}$ and the corresponding structure of the molybdate. There are three layers of molybdate in the structure of $\text{Mo}_3\text{O}_10 \cdot 2\text{H}_2\text{O} \cdot \text{H}_2\text{O}$ (see Fig. 1).
ASSOCIATION: INSTITUTE OF PHYSICAL CHEMISTRY AND ELECTROCHEMISTRY OF THE ACADEMY OF SCIENCES OF THE USSR, MOSCOW, RUSSIA
SUBMITTED: MARCH 1986

Crystalline Structure of the Effect of Triclinic Modification



Card 4/4

88846

S/026/65/000/012/009/009
A166/A027

54130

AUTHOR: Mnyukh, Yu.V., Candidate of Physics and Mathematics (Moscow)

TITLE: Monocrystals of Polymer Molecules

PERIODICAL: Priroda, 1960, No. 12, pp. 89 - 92

TEXT: The article discusses the structure of normal polymer crystals and compares it with that of monocrystals derived from the same polymers. Electron microdiffraction of the crystals showed that the molecular chains of the polymer were situated perpendicular to the plane of the crystalline lamina and consequently also perpendicular to the plane of each of its component layers. In paraffins the thickness of the layer is determined by the length of the molecules (in the given sample 6,000 Å). However, the thickness of one layer of polyethylene comprises a mere 100 - 120 Å in monocrystal form. Keller's explanation of this is that the polyethylene molecules in the crystal have a "folded" configuration (cf. Fig. 3b) so that the thickness of each layer is approximately equal to the distance between two successive bends in the hydrocarbon chain. Further studies have established this "folded" configuration in other linear polymers (gutta percha, polyamides, isotactic polyolefines and polyethers). It is now assumed

Card 1/2

88846

S/026/60/000/012/009/009

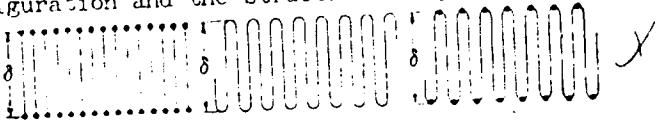
A166/A027

Monocrystals of Polymer Molecules

that the "folded" configuration is characteristic of any linear polymer with a regular periodic structure of the molecular chains. A close relation has been established between the "folded" configuration and the structure of spherolites.

There are 6 photos and 2 diagrams.

Figure 3: The formation of one layer by chain molecules. δ - thickness of the layer; a - normal paraffins, δ - equal to the length of the molecules. The dots indicate the nodal CH_3 groups. b - polyethylene, δ - equal to the period of bend. c - polyethers. Period of bend equal to length of structural unit, repeated along chain. Dots indicate ether groups.



Card 2/2

REF ID: A6514111
DATE: 06/14/2000
FILED: 06/14/2000

PC-4/P-4

FD/RW/RW

ACCEPTED BY: AF-504-365

6/0056/67/000/001/0019/0028

AUTHOR: Minyanov, Yu. V.; Kaygorodskiy, A. I.; Aseev, Yu. G.

36

35

TITLE: Investigation of the kinetics of the polymorphic alpha-beta and beta-alpha transformations in single-crystal p-dichlorobenzene

SOURCE: Zhurnal eksperimental'noi i teoretičeskoy fiziki, v. 49, no. 1, 1965,
19-28TOPIC-KEY: Single-crystal p-dichlorobenzene; polymorphic transformation;
organic crystals; molecular crystal; crystal growth; activation energy

ABSTRACT: The authors continue earlier investigations (DAN SSSR, v. 148, 1965) on the mechanism of polymorphic transitions in organic molecular crystals. In light of the earlier results, they review the concept of rate of polymorphic transformation and examine the factors affecting this rate, and show that the rate of transition of a unit volume to a different phase of a unit volume or unit area of the crystal is not a physical characteristic of the process in question. The formulated, in view of the difficulties of realizing such an experiment, the

Card 1/2

L-28731-65

ACCESSION ART: AP5004368

authors produced repeated $\alpha \leftrightarrow \beta$ transformations of single-crystal p -dichlorobenzene, measuring each time the rate of transformation or the linear phase separation transition and the equilibrium temperatures remained the same in all transformations. The experimental set-up and procedure are described briefly. The transformations were determined as a function of the number n of such transformations and the equilibrium temperature. A maximum was observed on the $V(n)$ curve, as well as a minimum in the dependence of this property. The saturation depends on the duration of the transformation. The crystal with the $V(n)$ curves presumed to originate from the α form of p -dichlorobenzene was found to contain a small amount of the β form.

ABSTRACTED FROM: USSR INSTITUTE OF ORGANIC CHEMISTRY (INSTITUTE OF ORGANIC COMPOUNDS)

SUBMITTED: 12 May 64

EXCL: 00

SUB CODE: SS, 00

MR. REV. SOV: 004

OTHER: 001

Card 2/2

MNYUKH, Yu. V.

Structure of normal paraffins and their solid solutions. Zhur.
strukt. khim. 1 no.3:370-388 S-O '60. (MIRA 14:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Paraffins)

S/020/60/133/005/034/034/XX
B004/B064

AUTHORS:

Mnyukh, Yu. V., Belavtseva, Ye. M., and Kitaygorodskiy,
A. I.

TITLE:

The Morphology of the Molecular Packings in Linear Poly-
esters

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 5.
pp. 1132-1135

TEXT: In the present paper, the authors continue their study of the molecular packing by electron microscopic examination, electron diffraction pictures and small-angle X-ray pictures. The small-angle X-ray pictures indicated a periodicity of the order of magnitude 100 - 200 Å; the size of the superperiod increased with the length of the chemical structural unit (Table 1: polyesters of decumethylene glycol with oxalic, succinic, glutaric, adipic, azelaic, and sebacic acid). As was the case with other linear polymers with uniform chain (Refs. 4-8), the authors could also for linear polyesters (molecular weight 2000 - 3000) prove the existence of monocrystalline forms, partly developing spiral-like

Card 1/3

The Morphology of the Molecular Packings
in Linear Polyesters

S/020/60/133/005/034/034/xx
B004/B064

terraces, partly monocrystalline layers (Fig. 1). The microdiffraction pictures (Fig. 2) showed that the molecule axes are perpendicular to the layers. The height of the terraces is explained (according to A. Keller) by the "bending period" by the example of n-paraffins, polyethylene, and polyester (Fig. 3). For decamethylene glycol ester, the period of the chemical structural unit is 17 - 30 Å, for icosamethylene glycol ester 30 - 43 Å. The electron microscopic pictures yielded for the terrace heights of the first-mentioned esters values of 15 - 35 Å, and 40 - 70 Å for the latter. Since the X-ray pictures reflected, however, only the diffraction picture of the sub-cell, neither confirming the superstructural periodicity (100 - 200 Å), nor that of the crystalline layers, the authors conclude that the terrace height of the macrocrystals is no constant quantity. Electron-microscopic examinations of samples crystallizing from the melt (Fig. 4), yielded dendritic single layers consisting of parallel threads that united to form bands of a width of approximately 130 Å and a height of approximately 30 Å. If crystallization was inhibited, spherulitic forms resulted. The authors thank E. I. Fedin for assistance and S. V. Vinogradova for placing the samples at their disposal. There are 4 figures, 1 table, and 13 references: 3 Soviet, 3 US, and 3 British.

Card 2/3

The Morphology of the Molecular Packings
in Linear Polyesters

S/020/60/133/005/034/034/XX
B004/B064

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk
SSSR
(Institute of Elemental-organic Compounds of the Academy
of Sciences, USSR)

PRESENTED: March 23, 1960, by I. V. Obreimov, Academician

SUBMITTED: March 3, 1960

✓

Card 3/3

PHASE I BOOK EXPLOITATION SOV/5502

Kitaygorodskiy, Aleksandr Isaakovich, and Yurii Vladimirovich
Mnyukh

Kak postroyeny polimery; po novym dannym (The Structure of Polymers;
According to New Data) Moscow, Izd-vo "Znaniye", 1961. 31 p.
(Series: Vsesoyuznoye obshchestvo po rasprostraneniyu politiche-
skikh i nauchnykh znanii. Seriya IX, 1961: Fizika i khimiya, no. 5)
25,500 copies printed.

Sponsoring Agency: Vsesoyuznoye obshchestvo po rasprostraneniyu
politicheskikh i nauchnykh znanii.

Ed.: I. B. Faynboym; Tech. Ed.: L. Ye. Atroshchenko.

PURPOSE : This book is intended for the general reader interested
in the structure and properties of polymeric materials.

COVERAGE: The booklet bases predictions of thermal and mechanical
properties of polymers on their atomic packings and micromorpho-
logical peculiarities of structure. The configurations of many
Card 1/3

SOV/5502

The Structure of Polymers (Cont.)

organic molecules, including polymers, are analyzed on the basis of geometric factors such as valence bond length, "ideal" bond angles, interatomic radii, and physical factors such as steric hindrance and van der Waals forces. The analytical techniques of x-ray and radiospectroscopic methods, including electron paramagnetic resonance (EPR), nuclear magnetic resonance (NMR), and nuclear quadrupole resonance (NQR) are cited. Future trends of research envision micromorphological investigations combining electron diffraction and electron microscope techniques, with the resolving power of the microscope brought to 3 - 4 Å and the area of microdiffraction reduced to 100 - 200 Å in order to study as desired any small section of the electron microscope image. No personalities are mentioned. There are 8 references, all Soviet.

TABLE OF CONTENTS:

The Microworld and Macromolecules	3
The Configurations of Organic Molecules Card 2/3	4

KITAYGORODSKIY, O. I.[Kytaihereds'kyi, O. I.]; MNYUKH, Yu. V.[Mniukh, IU.V.]

"Strange" states of matter. Des. such. fiz. no. 6:127-133
'62. (MIRA 16:1)

(Matter—Constitution)

MNYUKH, Yu.V., kand.fiz.-metem.nauk; ASADOV, Yu.G.

Crystal in a crystal. Priroda 52 no.4:100-102 '63.

(MIRA 16:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR, Moskva.
(Crystals--Growth)

S/020/63/148/005/016/029
B144/B186

AUTHORS: Kitaygorodskiy, A. I., Minyukh, Yu. V., Asadov, Yu. G.

TITLE: Polymorphous single crystal - single crystal transition in
p-dichloro benzene

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 5, 1963, 1065-1068

TEXT: By a microscopical study of the behavior of p-dichloro benzene crystals in glycerin it was established that $\alpha \rightarrow \beta$ transition takes place above 30.8°C (the temperature of phase equilibrium), and that the temperature of $\alpha \rightarrow \beta$ transition increases with increasing purity of the substance and perfection of the crystals. Perfect crystals mostly melted in the α -phase at 52.7°C. Two types of $\alpha \rightarrow \beta$ transition were observed: single-centered and multi-centered. From microphotographs it was evident that the polymorphous single crystal - single crystal transition is due to the growth of a bounded single crystal from a solid monocrystalline medium which is not in the equilibrium phase. The direction of growth can be varied by changing the temperature. The mutual orientation of the α and β lattices was investigated by an attempt to find an answer to the following

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S/020/63/148/005/016/029
B144/B186

Polymorphous single...

3 questions: (1) Is there a fixed connection between the orientations of the α and β lattices? (2) If so, what is their mutual orientation? (3) If not, is there a discrete selection of possible mutual orientations, or are they purely accidental? Based on a series of Laue patterns taken from one and the same crystal over the entire transition period, it was established in a very carefully planned experiment that such a great number of lattice orientations develops in the new phase, and that their random growth becomes probable. The Laue patterns taken from a crystal subjected to 10 transitions revealed that all the β -phases had lattices of different orientation. Monocentered as well as multicentered transition could be observed in the same crystal, and perfect crystals were obtained from non-ordered crystals. Two inconsistent conclusions are drawn from these observations, which must still be cleared up. (1) Since the mutual orientation was never repeated in the numerous $\alpha \rightarrow \beta$ transitions observed, non-ordered transition should be assumed; (2) The orientation of the α -crystals in a series of $\alpha \rightarrow \beta \rightarrow \alpha \rightarrow \beta$ transitions was often the same, which makes an ordered transition probable. It is suggested that question 1 may be answered in the affirmative and that a fixed relationship may be assumed. A certain analogy to the polymorphous monocrystal - polycrystal transition is evident. The difference between the two types of transition is probably due to

Card 2/3

Polymorphous single...

S/020/63/148/005/016/029
B144/B186

conditions determining the number of growing centers. There are 4 figures and 1 table.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences USSR)

PRESENTED: October 22, 1962, by A. V. Shubnikov, Academician

SUBMITTED: October 18, 1962

Card 3/3

MNYUKH, Yu.V.

Linear dependence between the melting points and heat content of n-paraffins. Zhur.fiz.khim. 37 no.10:2371-2372 O '63. (MIRA 17:2)

1. Institut elementoorganicheskikh soyedineniy Ak.SSR.

ASADOV, Yu.G.; KORESHKOV, B.D.; PETROPAVLOV, N.N.; KOCHIN, V.M.; MUSIKH, Yu.V.

Measuring the density of the α and β phases of p-dichlorobenzene
in a gradient tube. Kristallografia 9 no.6:921-923 N-D '64.
(MIRA 18:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

MNYUKH, V. V.; KITAYEV, V. D.; ASANOV, G. G.

On the basis of polymerization $\overline{\beta}$ -trans-1,4-pentadiene in the presence of LiAlD_4 , the authors obtained a series of polyisobutylene polymers with different degrees of branching.

The authors also obtained some polyisobutylene polymers.

MNYUKH, Yu.V.; TSENEVA, M.A.

Polymorphism in organic molecular crystals. Dokl. AN SSSR 162 no.2:
326-329 My '65. (MIRA 18:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted
November 19, 1964.

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Mitral insufficiency (manifestations and clinical case). Med.
Intern. (Bucur.) 16 nr.1(8) 275-277 - 1964

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Role of foreign trade in the economic development of the Hungarian People's Republic. Vnesh.torg.29 no.8:9-17 '59.
(MIRK 12:11)

1. Zamestritel' glavnogo redaktora Rumynskogo telegrafnogo
agentstva Adzherpres.
(Rumania--Commerce)

MOBCHAN, B.A.

Chemical non-uniformity of the primary grain in overheating.
Avtom.svar. 6 no.5:28-37 S-0 '53. (MLRA 7:11)

1. Institut elektrosvarki im. Ye.O.Patona Akademii nauk USSR.
(Steel alloys)

ZAVALISHIN, N.I., prof.; LIDOV, I.P., dots.; LITOVCHEJKO, I.G.; MESHKOV, V.V., dots.; MOBIL'NITSKIY, M.B., kand. med. nauk; ARTEN'YEV, S.G., red.; BUL'DYAYEV, N.A., tekhn. red.

[Organizational principles in providing medical care for troops]
Osnovy organizatsii meditsinskogo obespecheniya voisk. Moskva,
Medgiz, 1961. 219 p.
(MIRA 15:2)
(RUSSIA—ARMY—MEDICAL CARE)

KOBIN, K. V.

Aug 1947

USSR/Engineering
Boilers
Petroleum Industry

"Tests and Experiments for Improving the Operation
of Coal-Burning Boilers of the Petroleum Industry,"
K. V. Kobin, TAKI, MolotovNef., 4½ pp

"Energeticheskiy Byulleten'" No 8

"The greatest disadvantages of using coal for oil.
The burning boilers is the small combustion chamber. The
change from liquid to solid fuel resulted in lowering
the thermal production of the boilers. The author
includes diagrams and graphs to illustrate the methods
for improving the exploitation of coal. Among the
improvements was forced draft equipment and use of
22239

Aug 1947

USSR/Engineering (Contd)
Boilers
Petroleum Industry

"This overhauling was conducted in
the fall of 1946 at Boiler No 3 in Krasnokamsk.

22239

FC IS, V.

Designs of three alternatives for a type of prestressed concrete.

p. 451 (Inzynierskie Stavby) Vol. 5, no. 3, Sept. 1967, Praha, Czechoslovakia

SC: MONTHLY INDEX OF EAST EUROPEAN ACQUISITIONS (EEAI) IC, VOL. 7, NO. 1, JAN. 1968

MOC, G.

"Checking caves during deep rotary boring."
Jhli, Praha, Vol 4, No 5, May 1954, p. 151

Sc: Eastern European Accessions List, Vol 5, No 1, Oct 1954, L 1. Course-ss

Z/057/60/000/000/005/010

E073/E335

AUTHORS: Moc, Jiří and Podlaha, MiroslavTITLE: On the Preparation of a Solution of Potassium in
Liquid Ammonia for Studying Paramagnetic ResonancePERIODICAL: Československy časopis pro fysiku 1960, No. 6,
pp. 534 - 536

TEXT: A procedure is described for preparing samples of a solution of potassium in liquid ammonia which is suitable for studying its physical properties by the method of paramagnetic resonance. Even traces of impurities influence the time and duration of the decomposition. The method of preparing the solutions, described in earlier work of one of the authors (Ref. 3), has been improved further to achieve the highest purity and good reproducibility of results. The authors found that the type of glass used for vacuum distillation of the potassium and the distillation temperature are extremely important. If the temperatures of 450°C in the distillation space and 250°C in the condensation space are not exceeded "SIAL" glass is adequate for the purpose. For higher temperatures the two-layer alkali-resisting alumina glass is proved.

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Z/037/60/000/000/005/010
E073/E335

On the Preparation of a Solution of Potassium in Liquia A: .ia
for Studying Paramagnetic Resonance

suitable; no corrosion was detected in this at temperatures up to 500 °C. In dosing the potassium into the appropriate (bottom) space of the apparatus Q which is calibrated by means of a capillary, care has to be taken that the length of the potassium column in the capillary does not exceed 5 mm for a capillary diameter of 1 mm. If this is not done distillation of the potassium from the capillary into the space Q would require a relatively long time, during which the potassium would have a corrosive effect on the capillary glass. After dosing the potassium pure ammonia was distilled by means of a tube r into the space P in a quantity corresponding to the required concentration of the solution whilst cooling the entire equipment by a mixture of acetone and solid carbon dioxide. The space P is separated from the space Q by a seal and the solution is prepared by piercing this seal q. After dissolving the potassium at the temperature of the cooling mixture the seal S at the bottom of the apparatus is pierced and the solution flows into the bottom part of the apparatus which is

Card 2/5

Z/057/00/006/005/010
E073/E335

On the Preparation of a Solution of Potassium in Lithium
for Studying Paramagnetic Resonance

evacuated to 10^{-5} mm Hg and degassed in the furnace for a duration of 6 to 8 hours. The bottom part consists of three ampules which are sealed off after they are filled. Experience proved that it is preferable to cool the sealed-off ampules with a mixture of acetone and solid carbon dioxide rather than cool it with liquid nitrogen. The ampules with the solutions were prepared as follows: after filling the bottom part of the apparatus, applying simultaneously the cooling mixture, the vessel containing the cooling mixture was removed. A slight increase in the temperature drove out the solution from the top parts of the capillaries. However at the bottom part of the capillaries the solution remained, due to their high thermal inertia. Following that the entire bottom part of the apparatus was sealed off at the point t. During the process of sealing rotary vacuum pumps were put into operation, reducing the pressure in the space to be sealed so that the sealing, which lasted only a few seconds, could

Card 3/5

Z/037/60/000/006/005/010

E073/E335

On the Preparation of a Solution of Potassium in Liquid Ammonia
for Studying Paramagnetic Resonance

proceed smoothly. The individual ampules were then sealed at a lower point, u, whilst being continuously cooled. If the capillaries are long enough (about 5 cm) and if they are correctly and continuously cooled during the sealing process and prior to sealing the solution is driven out only from the top parts of the capillaries the concentration in the ampules will be prevented from changing either during the first or second sealing operation. The solutions in such ampules have reproducible properties. The duration of the decomposition of the solution depends on the concentration. At room temperature this duration can be almost 100 hours for a concentration of 0.2 mol^K/l NH₃. Acknowledgments are expressed to Z. Frait for his comments on the technology of the experiments.

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Card 4/5

E/057/b0/000/006/005/010

E073/B335

On the Preparation of a Solution of Potassium in Lithium Aluminate
for Studying Paramagnetic Resonance

There are 1 figure and 4 references: 2 Czech 1 German and
1 English.

ASSOCIATION: Fysikální ústav ČSAV, Praha
(Physics Institute of ČSAV, Prague)

SUBMITTED: April 9, 1960

Card 5/5

SURDAN, C.; ATHANASIU, Pierrette; SOFOPOL, G.; ERACHE, A.; MECANE, A.

Different epizootiological and anatomoclinical aspects of para-rickettsial infections in swine. II. Vaginitis testis in a boars. Stud. cereet. inframicrobiol. 16 no.3:245-253 '65.

NITULESCU, I., ing.; MOCANU, Ana, ing.; FILIPEANU, Livia, ing.; ANGHEL,
Lucia, geolog; SAPORTA, Ecaterina, ing.

Quantitative mineralogical analysis of technological ore
tests. Rev min 15 no.11:595-601 N '64.

MOCANU, C.

TECHNOLOGY

Periodicals: STUDII SI CERCETARI DE ENERGETICA. Vol. 1, no. 1, p. 6.

MOCANU, C. General theorems for the reduction of electric networks, p. 105

Monthly List of East European Acquisitions (EWA) LC, Vol. 8, No. 2,
February 1959, Inclass.

MOCANU, C.

TECHNOLOGY

PERIODICAL: STUDII SI CERCETARI DE ENERGETICA. Vol. 8, no. 4, 1958
MOCANU, C. Transmission of electromagnetic power on long three-phase
lines, of asymmetric construction, in an unbalanced regime. p. 573

Monthly List of East European Accessions (EAAI) LC, Vol. 8, No 4
April 1959, Unclass.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3

MICANU, C., et al. - *Nature*, 1980, v. 285, p. 251.

Evolution and landforms of the Cenozoic sedimentary rocks of the Andes, Chile.

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3"

MOCANU, C., lector (Bucuresti)

Honduras. *Natura Geografie* 16 no. 2: 81-83 Mr-4p '64.

RADULET, Remus; MOCANU, Constantin, ing.

Estimations of the pronounced stationary skin effect in
prismatic conductors. Rev electrotehn energet., no. 14, 1964.

1. Member of the Romanian Academy.

RADULET, Remus; MOCANU, Constantin

New form factor evaluation for the charge of the coreless induction furnaces at pronounced eddy current stowing. Rev
electrotechn energet 9 no.1&3-17 '64

1. Member of the Romanian Academy (for Radulet).

RUSU, R., dr.; DEUTSCH, L., dr.; DULCA, Fl., dr.; GOIA, E., dr.; NICOLAU,
Aatre, dr.; MOCANU, Gh., dr.; POPOVICI, C., dr.; COZOI, S., ir.

Contribution on the influence of meteorological factors on the
etiopathogenesis of acute vascular accidents. Med. Intern.
(Bucur) 17 no.5:505-608 My '65.

1. Lucrare efectuata in Sectia de boli interne, Spitalul Unificat,
Deva.

MOCANU, D. ; FREUD, C.

Welding processes as currently used by Rumanian railroads. p. 593
REVISTA CAILOF FERATE. (Caiile Ferate Romane) Bucuresti, Rumania.
Vol. 6, no. 11, Nov. 1958.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 7, July 1959

Uncl.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3

MOCANU, D. P., prof. eng.

Reconditioning worn out railroad car types by the IS3F
welding installation. Rev sailor fer 12 no. 104558-565 0 '64.

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3"

BUCHAREST

Dr V. MAGRIANU and Dr C. TONCU, Valeriu and Nicolae Ceausescu
(statie de malarie) Informante la statie de malarie, Bucuresti.

Incidentul lui Ionel Ionescu în trei zile în urmă (luni, 10 decembrie 1989).

În incident, Mihai Gheorghiu-Dej încercă să intre în locuința lui I. Ionescu, într-o casă din București.

În locuință, Ionescu se întâlnește cu o femeie, identificată ca fiind o femeie de 30 de ani, într-o relație româno-slovacă. Această femeie îi spune că este într-o situație deosebit de dificilă și că nu poate să se întoarcă în Slovacia, unde se află într-o situație similară cu cea a lui Ionescu. Ionescu îi spune că nu poate să se întoarcă în Slovacia și că nu poate să se întoarcă în România.

MOCANU, E.

MOCANU, E. Modern installations for separating petroleum products from waste water in refineries, p. 52.

Vol. 6, no. 11, Nov. 1955
ROMANIA-UNITED friendship
Bucuresti, Romania

Do: Eastern European accession Vol. 1 no. 2 April 1954

STATICESCU, P. ing.; OLTEANU, Gh., dr.; MATEI, A., ing.; MUNTEANU, E. ing.; LUTSCH, M., ing.; POPA, I., ing.; RACZ, Z., ing.; COSMA, I., ing.; LENGYEL, V., ing.; LUNGU, C., ing.; SINGER, M., ing.; RETU, I., ing.; GRIGORAS, m., ing.; CRACIUNESCU, C., ing.; COLIS, I., ing.; BACOS, M., ing.; ALEXANDRESCU, T., ing.; BERZOVAN, I., ing.; TOARNICZSKI, E., ing.; OCHIANA, S., ing.; MOGANU, E., ing.

Results obtained with different varieties in sugar-beet growing. Ind alim 14 no. 9:342-348 S'63.

1. Fabrica de zahar Giurgiu (for Matei, Munteanu).
2. Fabrica de zahar Bod (for Lutsch, Popa).
3. Fabrica de zahar Tg. Mures (for Racz, Cosma, Lengyel).
4. Fabrica de zahar Roman (for Lungu, Singer).
5. Fabrica de zahar Bucecea (for Cretu, Grigoras).
6. Fabrica de zahar Oltenia (for Craciunescu, Colis).
7. Fabrica de zahar Banat (for Bacos).
8. Fabrica de zahar Arad (for Alexandrescu, Berzovan).
9. Fabrica de zahar Ludus (for Toarniczski, Chiana).
10. Fabrica de zahar Sascut (for Mocanu).

BOBOC, N.; MOCANU, G. (Bucuresti)

On the notion of harmonic metrics on a hyperbolic
Riemann surface. Bull math Rum 4 no.1 2:3-21 '61.

1. Submitted December 1, 1962.

MOCANU, Gh.; BOBOC, N.

On the Men'shov properties (N). Comunicarile AR 11 no. 7: 749-753 '61.

1. Comunicare prezentata de academician S. Stoilow [deceased].

MANESCU, L., prof. emerit (R. Vilcea); BEJAN, Mircea (Galati); MUNTEANU, Dumitru (Bistrita); SACTIU, O.; SIMION, A. (Iasi); LEVIN, Alexandru, (Tallin, U.S.S.R.); HALIRCA, L., prof. (Breaza); LIVIU, Petre (Pucioasa); GRECU, Eftimie (Bucuresti); BENA, Dorin (Caransebes); SIMOVICI, Dan (Iasi); ILIE, Nicolae (Galesti); BOICESCU, Vlad (Craiova); VOICULESCU, Dan (Bucuresti); POPESCU, Adrian (Sibiu); PESTROIU, Daniel (Tirgu Jiu); NANUTI, Ion (Timisoara); MUSTA, St. (Oradea); POPESCU, Adriana (Sibiu); IONFESCU-TIU, C.; LAZAR, Maria (P. Neamt); FOCSENANU, M.I.; ACU, D. (Cluj); ZAMFIRESCU, Tudor; MOCANU, H. Ovidiu (Iasi); GEORGESCU, G. (Craiova); BERDAN, C. (Bacau); IACOMI, Ioana (P. Neamt)

Proposed problems. Gaz mat B 1^a no. 3:122-127 Mr '64.

Macanu ✓

PAPADOPOL, I.
Sof. 446 (in copy); Given Name

5

Country: Rumania

Academic Degree: Dr.

Affiliation: The Fattening Pen at Cazanesti (Ingrasatorie Cazanesti).

Source: Bucharest, Probleme Zootehnice si Veterinare, No 4, 1961,
pp 58-60.

Data: "The Behavior of Indigenous Anti-Aphthous Vaccines in Pigs."

Co-authors:

TUDOR, Despina, Veterinarian, The Fattening Pen at Cazanesti
(Ingrasatorie Cazanesti).
IOCANU, I., Veterinarian, Veterinary Circumscription (Circumscriptia Veterinara), Cazanesti.

DOROBANTU, Ilie; MOCANU, M., ing.; MOCANU, I., ing.; SERBANESCU, D., ing.;
BOGZA, Virgil, ing.; COJOCARU, V.

Advanced technology and the increase of labor productivity. Probleme
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11.1.1.2. *Autoparallel projective spaces.* A. G. Kuzmin performed a study [Cite. Mat. 15 (1953), 249-270] of commutative algebras and related commutative partially projective spaces. Let $P = P^n$ be a space with a linear affine connection (Γ_{ij}^k) which has the property that all its autoparallel lines given by

$$\frac{dx^i}{ds} = \Gamma_{ij}^i x^j \quad (1)$$

in some varieties of n -dimensionality when expressed in a suitable coordinate system. The superscript i indicates the number of equations of the autoparallel lines, which are linear in the coordinates x^i . If $\Gamma_{ij}^i = 0$, i.e., if the linear connection passes through a fixed point the P_{n-1} is a n -dimensional otherwise it is a general $(n-1)$ -fold projective space.

In this paper partially projective spaces are studied with the help of the general integral of (1) expressed as a power series. The author obtains in a simple way Weil's

APPENDIX C

2.2.10. In the P of a projective line ℓ , a general condition is that the conditions of a non-projective line ℓ' (in the sense of Definition 2.1) are satisfied. This means that there are a number of points $P \in \ell$ such that the ℓ -transformations of P will respect the projective transformations of ℓ' . The vanishing of one of the former conditions implies the vanishing of one of the new projective invariants provided the necessary and sufficient condition for the automorphism line (which is the case in the present situation).

2.2.11. By the same method, we further investigate the case where the condition $\alpha_1 = \alpha_2 = 0$ is violated. Then the general case (Fig. 8/4) necessitates additional conditions. We have to be able to obtain the conditions of Definition 2.1. These conditions are a system of differential equations in the P_i of order 2. A typical differential equation in the P_i of order 2 is

of the first order and of order two in the second case, or otherwise it may be applied a number of inequalities which express the condition that the P_i is not a

projective line. (See [17], Blasz, Szilay, Szele, 1938.)

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"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134820009-3

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Radius of univalence of holomorphic functions. Matem. fiz.
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A generalization of the contraction theorem in the class of univalent functions. Studii cerc mat Cluj 9 no.1/4:149-159 '58. (EEAI 10:5)

1. Institutul de calcul al Academiei R.P.R., Filiala Cluj.
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Mocanu, P. T. Sur un théorème de recouvrement dans la classe de fonctions univalentes. Gaz. Mat. Fiz. Ser. A (N.S.) 10(63) (1958), 473-477. (Romanian. French and Russian summaries)

Let S be the class of functions $w=f(z)$, holomorphic and univalent in $|z|<1$, satisfying $f(0)=0$ and $f'(0)=1$. The largest domain contained in the image of the domain D of the z -plane bounded by the circle $r=\cos \theta$ (in polar coordinates) is the convex domain of the w -plane whose boundary is given in polar coordinates (R_1, γ) by the parametric equations

$$R_1 = \frac{1}{2}(1-t^4)t^{-2}\exp[2(1-t^4)(1+t^4)^{-1}\log|t|],$$
$$\gamma = 2[\arctan t + 2t^3(1+t^4)^{-1}\log|t|]$$

for $-1 \leq t \leq 1$.

G. Springer (Lawrence, Kans.)

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Projective invariants of the species A_n of the symmetrical affine connection, which are the general partially projective spaces \mathbb{P}_n^{n-3}
Rev math pures 5 no.3/4:705-718 '60. (EEAI 10:5)
(Spaces, Generalized) (Invariants) (Geometry)
(Vector analysis) (Transformations (Mathematics))

350 AB
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C111/C222

16.3000

AUTHOR:

Mocanu, Petru N.

TITLE:

"On a certain problem in the class of univalent functions"

PERIODICAL:

Referat. vñz. zurnal, matematika, no. 2, 1962, p., abstract issue. ("Studii si cercetari mat. pure," R.R.R. Fil. Cluj", 1960, no.'1, p.-106)

TEXT: Let S be the class of functions $f(z)$, $f(0) = 0$, $f'(0) = 1$ which are regular and univalent in $|z| < 1$. Let $g(z)$ be a regular and meromorphic (only pole in $z = 0$) function in $|z| < 1$, where $g(0) \neq 0$. The theorem is proven: If $z = re^{i\theta}$, $r < 1$, is a root of the equation $f(z) = g(z)$ the absolute value of which is extremal if $f(z)$ varies in the class S , then r and θ are related through the system of equations

$$\frac{1-r^2}{r} \left| g(re^{i\theta}) \right| \left| \left(\frac{1+r}{1-r} \right)^{\operatorname{Re}(q)} \right| = 1,$$

$$\arg g(re^{i\theta}) - \theta + \operatorname{Im}(q) \ln \frac{1+r}{1-r} = 0,$$

$$\text{where } q = \pm \frac{1-\Omega}{1+\Omega}, \quad \Omega = \frac{re^{i\theta} g'(re^{i\theta})}{g(re^{i\theta})}.$$

f.

Card 1/2

On a extremum problem in the class . . . S/C4, b1, b2, b3, b4, b5, b6
In addition, an equation is found which explicitly determines the
extremal function of class A. The proof is based on the use of the
Schiffer-Goluzin variational formula.
[Abstracter's note: Complete translation.]

Card 2/2

f
V

Author: (in code), given name

Country: Romania

Academic Degrees: Dr.

Affiliation: not given

Source: Bucharest, Romania, No 5, May 61, pp 315-319.

Data. "Pharmacodynamic Research on the Therapeutic application of some ophthalmologic vintments."

Co-author:

ADGUT, R., Pharmacist.

Document 1

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Country: Romania

Author(s): Dr. -Dr.,

Affiliation: Institute of Pathology and Animal Hygiene (Institutul de Patologie si Igienea animalelor);
Source: Bucharest, Institutul de Veterinaria, No 6, Aug 1961,
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Co-authors:

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- ✓ NICOLAE, G., -Dr., Institute of Pathology and Animal Hygiene.
- ✓ NICOLAE, Gh., Veterinarian, Institute of Pathology and Animal Hygiene.
- ✓ NICOLAE, S., Institute of Pathology and animal Hygiene.
- ✓ NICOLAE, V., Veterinarian, State Agricultural Farm (Gospodarie agricole de stat), Minulescu Sarat, Floresti Neamt.
- ✓ NICOLAE, V., Veterinarian, Circumscription of Cogelence (Circumscripția Cogelence), Dobrogea Neamt.

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